Nurse Staffing and Adverse Patient Outcomes

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ABSTRACT

Knowledge regarding the influence of nurse staffing on patient outcomes provides information to nurse administrators for determining numbers of nursing personnel in each units in order to promote a quality of care in nursing care. The purposes of this study is to identify the relationships between nurse staffing and adverse patient outcomes. Data were received from the documentation of 98 medical and surgical nursing units of 15 hospitals located in the northern region of Thailand. The results revealed that nursing working hours per patient day were positively related to patient falls, pressure ulcers, and urinary tract infections (UTIs), while the proportion of professional nurses was negatively associated with patient falls. The proportion of expert position professional nurses was negatively correlated to patient falls, pressure ulcers, and UTIs. The model for predicting patient fall incidence included nursing working hours per patient day and the proportion of expert position professional nurses. The model for predicting pressure ulcer incidence included the proportion of expert position professional nurses, nursing unit types, and gender of patients admitted in nursing units. The model for predicting UTI incidence included nursing working hours per patient day, the proportion of expert position professional nurses, and nursing unit types. The results of this study revealed the significant influence of the expert position professional nurses on patient outcomes, which reflect nursing care quality.

Key words: Nurse staffing, Patient outcomes, Patient falls, Pressure ulcers, Pressure sores, Urinary tract infection

INTRODUCTION

For more than five decades, the quality of health care has been a concern. Presently, the quality of health care is a global concern of both health care providers and consumers. To access the quality of health care, Donabedian (1980) recommended that structures, processes, and outcomes of care should be evaluated. Especially, outcome assessment can be used to ascertain what matters most; the effect of care on the patients' health and well being (Donabedian, 2003). Patient outcomes that are identified as sensitive to nursing are the most that are relevant, based on nurses'